

Watering the Vegetable Garden

The home gardener has several ways of irrigating the garden: a watering can; a garden hose with a fan nozzle or spray attachment; a portable lawn sprinkler; a soaker hose; or drip or trickle irrigation. Most of these options are simple to use and work adequately. While drip or trickle irrigation requires special equipment, it is the best method to use for conserving water.

The watering can and hose are fine for small gardens. When watering with the hose, the low pressure stream of water should be directed to the base of the plant and not the foliage.

Overhead sprinklers offer a wide range of watering patterns and area coverages. They are convenient but not very water-efficient. During hot, windy days, especially with small droplet sizes, a considerable amount of water is lost to evaporation. Also, many sprinklers deposit less water as one moves outward away from the source. The sprinkler needs to be placed at staggered locations to provide adequate overlap; this usually results in an overapplication of water beyond the plant's needs. Oscillating sprinklers apply water more evenly than overhead sprinklers and can be easily adjusted to cover square or rectangular areas. Watering the foliage with a sprinkler may increase disease problems; however, watering in early morning should reduce the chances for disease outbreaks.

The soaker hose is an inexpensive and easy watering device. It is a hose made of plastic or canvas tubing that allows water to seep out all along its length at a slow rate. Water is conserved because the flow is directed into the ground near the plant with little loss to runoff or evaporation. The gentle

stream of water causes little or no compaction of soil or splashing of muddied water on plants. Finally, the drip or trickle system has emitters ideally suited for raised bed or container gardens. Short tubes, or emitters, come off a main water supply hose. The emitter places the water directly at the roots of the desired plants leaving leaves and fruits dry. The drip system allows the gardener to replace the water lost on a daily basis. By including a filter or self-flushing emitters in the system to prevent clogging, the drip system is a cost-effective irrigation tool that uses a minimum amount of water.

A gardener should be aware of periods in the development and growth of vegetables when an adequate amount of water should be available. Generally, the first few weeks after planting and transplanting and during the development of fruit or storage organs are times when plants may be adversely affected by shortages of water.

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